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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/075,216	02/14/2002	Michael Alois Kolowski	DN2002024	7021

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EXAMINER	
MAKI, STEVEN D	

ART UNIT	PAPER NUMBER
1733	

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/075,216	KOLOWSKI ET AL.	
	Examiner	Art Unit	
	Steven D. Maki	1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 April 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *17-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *17-32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1) The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2) Claims 17-32 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

As to claims 17 and 29, the subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention (i.e. the new matter) is "each array widening continuously from the first and second array ends to the array midsection" (claim 17) / "each array widening continuously from the first and second array ends to the relatively wider array midsection" (claim 29). This subject matter, which has no explicit basis in the original disclosure, is not reasonably conveyed by the original disclosure. The original disclosure describes each array as having five tread elements and the array having a centerline inclined at less than 45 degrees and forming a circumferential row of large elongated patterns spaced by boundary grooves, but does not describe widening each array continuously from first and second array ends to an array midsection. The expression "array midsection" is not found in the original disclosure. It is acknowledged that an array inherently has a "midsection". However, the description of "each array

widening continuously from the first and second array ends to the relatively wider array midsection" requires knowing the size of the midsection and in particular, the boundaries of the midsection. The original disclosure provides no guidance as to the location of the boundaries of the midsection and as such indicates that, at the time of filing the original disclosure, applicant did not contemplate and had no possession of "each array widening continuously from the first and second array ends to the array midsection" or "each array widening continuously from the first and second array ends to the relatively wider array midsection" as set forth in claims 17 and 19 respectively. This is especially true since the above noted language appears to exclude at least the figure 4 embodiment and the figure 12 embodiment. In figure 4, the array comprises "narrow sections" between boundary groove 62 and groove 64. Grooves 64, 65 (in contrast to the tread elements) are not part of the array. In figure 12, the array has a pair of "narrow sections".

As to claims 19 and 32, the subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention (i.e. the new matter) is (a) the combination of claim 19 and amended claim 17 and (b) the combination of claim 32 and amended claim 29. The original disclosure fails to reasonably convey using "small" tread elements at the ends of an array widening the array to the midsection. Figure 9 shows "small" tread elements at the ends, but the array has narrow sections. If Figure 5 is considered to illustrate the array widening continuously from the first and second array ends to the midsection, it does not also

show smaller tread elements at the first and second ends of each array (Figure 5 illustrates "large" tread elements at the ends of the array).

3) The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4) Claims 17-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 17 and 29, "each array widening continuously from the first and second array ends to the array midsection" (claim 17) and "each array widening continuously from the first and second array ends to the relatively wider array midsection" (claim 29) is ambiguous. In view of the lack of guidance in the original disclosure as to the scope and meaning of the above noted language including for example the location of the boundaries of the midsection, one of ordinary skill in the art is not reasonably appraised of the scope of protection afforded by the above noted language.

5) The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

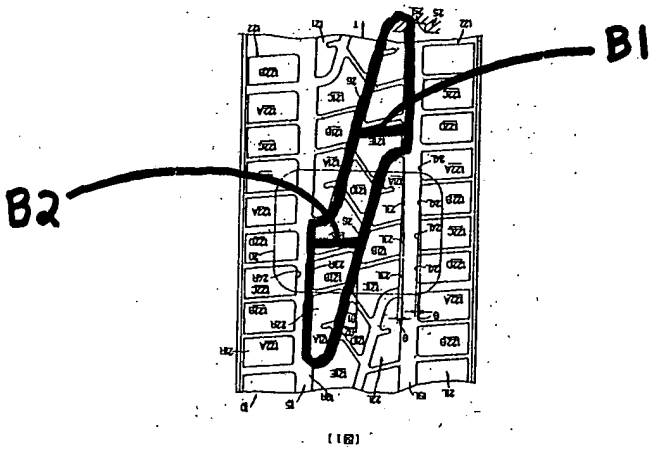
> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Japan '207

7) **Claims 17-18, 20, 23, 25, 26, 27, 29, 30 and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by Japan '207 (JP 6-135207).**

The claimed tread reads on the tread having the tread pattern shown in figure 1. The claimed central array reads on the "central array" comprising seven blocks 121A, 121B, 121C, 121D, 121E, etc. Japan '207 teaches delimiting the central array using slant grooves 26 and portions of grooves 19L, 19R. The slant grooves have oppositely curved end sections. The slant grooves 26 are inclined at inclined at an angle of 1-15 degrees with respect to the circumferential direction and the portions of grooves 19L, 19R are slightly inclined at an angle of for example 2 degrees. Figure 1 of Japan '207 is reproduced below with markings added by the examiner:



The markings added by the examiner indicate one of the central arrays of tread elements and shows example boundaries B1 and B2 of a "midsection" of the array. As to claim 17, the arrays overlap. For example block 121A (a block at the end of one

array) is adjacent a block 121D (a middle block of another array). As to claim 29, Japan '207's teaching to taper the blocks adjacent grooves 19L, 19R at 2 degrees forms a shoulder groove as claimed.

As to each array widening continuously from the first and second ends to the array midsection / the relatively wider midsection, claims 17 and 29 continue to read on Japan 207's array and fail to require an extent of widening at each end of the array longer than that shown by Japan 207 in figure 1. The term "midsection" (which is not defined in claims 17, 29 or the original disclosure) is sufficiently broad to read on a section of Japan 207's array comprising block 121D and at least a portion of blocks 121C and 121E. As can be seen from Japan 207's figure 1, Japan 207's array continuously widens from the end of block 121A to the middle of block 121C. The subject matter of "widening continuously" is describing *the array width between* the end and the midsection instead *of the array width of* the midsection. Claims 17 and 29 fail to require either a portion of or the entirety of the midsection to be wider than the section of the array between the midsection and either end of the array. The above noted marked up copy of Japan 207 indicates an example of the boundaries of a midsection. See lines B1 and B2. The width of the midsection *at* lines B1 and B2 is "relatively wide" because it is wider than the width of the slant groove 26 or block 121A. The array continuously widens from one end of the array to boundary B1 and from the other end of the array to boundary B2.

As to the remaining claims: The circumferential ends of two adjacent slant grooves 26 are connected by a slightly inclined portion of a circumferential groove 19L,

19R. The claimed first boundary groove reads on the combination of one of the slant grooves 26 and the slightly inclined portion of one of the circumferential grooves (19L, 19R) extending from one end of the one slant groove to one end of the other slant groove. The claimed second boundary groove reads on the other slant groove 26 and the other of the slightly inclined portion of the circumferential grooves (19R, 19L) extending from the other end of the other slant groove to the other end of the one slant groove. The curved portion of slant groove 26 intersects the slightly inclined portion of the circumferential groove at an angle less than 90 degrees (an acute angle). As to curvilinear, note the oppositely curved portions of slant groove 26. Claim 23 fails to require the boundary grooves to be curvilinear throughout their length. The tread pattern in figure 1 is non-directional.

8) **Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japan '207**.

As to claims 21 and 22, it would have been obvious to use 10 or 15 tread elements in Japan '207's central array since Japan '207 shows forming a multitude of the blocks between the slant grooves.

9) **Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Japan 207 in view of Campos et al (US 4598748).**

As to claim 24, it would have been obvious to one of ordinary skill in the art to provide Japan 207's tread with the claimed three or more distinct pitches since (1) the geometric pattern of Japan 207's tread repeats along the circumference of the tread and (2) Campos et al suggests using at least three different pitches for a repeating

geometric pattern such as that shown in figure 1 to reduce noise (col. 1 lines 45-47, col. 3 lines 5-10).

10) **Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Japan 207 in view of Japan 607 (JP 4-193607).**

As to claim 28, it would have been obvious to one of ordinary skill in the art to provide Japan 207's tread with different number blocks without changing the central region and thereby make the tread asymmetric since Japan 607 teaches using different number of blocks in shoulder rows without changing the central region to provide the tire with good straight running performance (compare figures 2 and 4 and see abstracts).

Japan 210

11) **Claims 17-23, 25-26 and 28-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japan 210 (JP 8-32421) in view of Japan 631 (JP 7-186631).**

Japan 210 discloses a pneumatic tire having a tread comprising shoulder blocks and center blocks. The center blocks are arranged in repeating arrays of blocks inclined at 10-30 degrees with respect to the circumferential direction wherein each array is defined by steeply slant inclined grooves 2. See figures, abstract and machine translation. Japan 210 does not recite configuring the steeply inclined row of central blocks such that they widen continuously from the first and second array ends to the relatively wider array midsection.

As to claims 17 and 29, it would have been obvious to one of ordinary skill in the art to configure the steeply inclined arrays of central blocks of Japan 210 such that they "widen continuously from the first and second array ends to the relatively wider array

midsection" since Japan 631 teaches suggests shaping steeply inclining arrays of blocks such that "the array widens continuously from the first and second array ends to the array midsection" as shown in figure 1 to thereby obtain low sliding on road surface in the transverse direction due to the edge of each block acting effectively (paragraph 10 of machine translation).

As to the remaining claims: As to claims 18 and 31, the blocks at the ends of Japan 210's array has acute angle corners. As to claims 19 and 32, Japan 631 suggests widening the array from the array ends and thereby suggests smaller blocks as claimed. As to claim 20, Japan 631 shows the array, which widens from its ends, as being between non-linear boundary grooves. As to claims 21 and 22, it would have been obvious to provide each of Japan 210's arrays such that each array has at least 10 or at least 15 blocks depending on the desired number of blocks and grooves since Japan 207 teaches forming the blocks by crossing a desired number of slant groves 2, 3. As to claim 23, Japan 631 suggests curvilinear boundary grooves. As to claim 25, Japan 210's array may have five blocks (figure 1). As to claim 26, Japan 210's array is inclined at 10-30 degrees with respect to the circumferential direction. As to claim 28, Japan 210's tread pattern is asymmetrical. As to claim 30, the upper end of a first array and the lower end of third array are circumferentially opposite the midsection of a second array located between the first and third array since all of Japan 210's arrays are overlapping.

12) **Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Japan 210 in view of Japan 631 as applied above and further in view of Campos et al (US 4598748).**

As to claim 24, it would have been obvious to one of ordinary skill in the art to provide Japan 210's tread with the claimed three or more distinct pitches since (1) the geometric pattern of Japan 210's tread repeats along the circumference of the tread and (2) Campos et al suggests using at least three different pitches for a repeating geometric pattern such as that shown in figure 1 to reduce noise (col. 1 lines 45-47, col. 3 lines 5-10).

Remarks

13) The rejections based on Lindner et al and Fontaine et al set forth in the last office action have been withdrawn in view of the addition of "each array widening continuously from the first and second array ends to the array midsection" to claim 17 and the addition of "each array widening continuously from the first and second array ends to the relatively wider array midsection" to claim 29.

Applicant's arguments with respect to claims 17-32 have been considered but are moot in view of the new ground(s) of rejection.

With respect to Japan 207, applicant's arguments filed 4-28-05 have been fully considered but they are not persuasive. Amended claims 17 and 29 are interpreted as continuing to read on Japan 207 for the reasons discussed above. In any event, note the application of Japan 210 and Japan 631.

With reference to the attachments in the response filed 4-28-05, applicant argues that the midsection of Japan 207 is not wider than the end portion. This argument is not persuasive. First: None of the claims require a midsection which is wider than an end portion. Second: The claims (and the original disclosure) fail to define midsection as being limited to midsection M exclusive of end portion E.

Applicant's arguments regarding claims 21 and 22 are not persuasive since Japan 207 broadly teaches using a group of center blocks and applicant has provided no convincing argument and / or evidence as to why Japan 207 is limited to a group of seven blocks.

Applicant argues "...that the lower point end of block 121E is not opposite a midsection of the elongate sides of upper and lower adjacent arrays as "midsection" is defined in the claims". (page 10 of response filed 4-28-05). This argument is not persuasive. First: The claims fail to define "midsection". The claims describe what the midsection does (it cross the equatorial centerplane) but fail to describe what the midsection is (e.g. fail to define the boundaries of the "midsection" or how close the boundaries of the midsection are to the ends of the array). Second: The claims fail to require the upper and lower ends of the arrays to be *aligned on* (a) the centerplane CP of the array, (b) a plane parallel to the centerplane CP or (c) line C as shown in the attachment to the response filed 4-28-05. On page 10 of the response filed 4-28-05, applicant states: "The 'midsection' of each array is between the ends of the array and crosses the centerplane". As noted above, the "midsection" of Japan 207 is sufficiently broad to read on a section of Japan 207's array comprising block 121D and at least a

portion of blocks 121C and 121E. Japan 207's "midsection" comprising block 121D and at least a portion of blocks 121C and 121E falls within the definition of midsection given by applicant on page 10 of the response filed 4-28-05 because the section defined by blocks 121C, 121D and 121E is "between the ends of the array and crosses the centerplane". Applicant argues that block 121A is radially adjacent a block 121D of another array, but is clearly not circumferentially opposite. The examiner disagrees since blocks 121A and on circumferentially opposite sides (instead of the same circumferential side) of the "midsection" of Japan 207's array which comprises block 121D and at least a portion of blocks 121C and 121E. Applicant also argues that block 121D of each array of Japan 207 is clearly not wider than block 121A and therefore cannot be considered part of a wider midsection crossing the centerplane. This argument is not commensurate in scope with the claims and is therefore not persuasive since claims 17-32 fail to specify the width of the array at the centerplane

14) No claim is allowed.

15) Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

16) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven D. Maki whose telephone number is (571) 272-1221. The examiner can normally be reached on Mon. - Fri. 7:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (571) 272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Steven D. Maki
July 23, 2005

Steven D. Maki 7-23-05
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